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THE APPLICATION OF DOW CHEMICAL'S PERFLUORINATED MEMBRANES IN PROTON-EXCHANGE MEMBRANE FUEL CELLS

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Dow Chemical's research activities in fuel cell devices revolves around the development and subsequent investigation of the perfluorinated ionomeric membrane separator useful in proton-exchange membrane systems. Work is currently focusing on studying the effects of equivalent weight, thickness, water of hydration, pretreatment procedures, as well as the degree of water management required for a given membrane separator in the cell. The presentation will include details of certain aspects of the above as well as some of the requirements for high and low power generation.